

METHOD, APPARATUS AND COMPUTER PROGRAM PRODUCT FOR
PERFORMING DATA PACKET CLASSIFICATION

ABSTRACT OF THE DISCLOSURE

A method, apparatus and computer program product is provided for classifying a target data packet entering a network interface. For each of a plurality of received classification parameters, at least one program module is generated. Each program module tests a pre-defined field(s) of the target data packet for adherence to the classification parameter(s) with which the program module is associated. A pre-classification header is generated wherein an indication is made of where one or more pre-defined fields are located in the data packet if the field is present. Maintaining locations of the pre-defined fields of the target data packet in the pre-classification header prevents having to re-calculate the addresses of the pre-defined fields of the target data packet. Eliminating the need for re-calculating the addresses of the pre-defined field(s) can allow the classification process of the present invention to obtain an optimal execution speed.